

- (d) controlling [the] proportions of the fluid flowing through the first and second passageways;
- (e) analyzing the fluid discharged through the second passageway by determining acid content of the fluid;
- (f) increasing [the] proportion of the fluid which is conveyed to the filter if the [quality] acid content of the discharged fluid is [below] above industry standards; and
- (g) decreasing [the] proportion of the fluid which is conveyed to the filter through the first passageway if the [quality] acid content of the discharged fluid is appreciably [above] below industry standards.

20. (amended) [The method of claim 16, wherein the fluid is a cooking fat or a cooking oil] A method for controlling quality of a fluid which is to be purified, the method comprising the steps of:

- (a) providing a filter for filtering the fluid;
- (b) conveying a portion of the fluid to be filtered to the filter through a first passageway;
- (c) discharging a portion of filtered fluid and a portion of unfiltered fluid through a second passageway;
- (d) controlling proportions of the fluid flowing through the first and second passageways;
- (e) analyzing the fluid discharged through the second passageway by determining free fatty-acid content of the fluid;
- (f) increasing proportion of the fluid which is conveyed to the filter if the free fatty-acid content of the discharged fluid is above industry standards; and
- (h) decreasing proportion of the fluid which is conveyed to the filter through the first passageway if the free fatty-acid content of the discharged fluid is appreciably below industry standards.

Antecedent basis for the above amendments is provided by the specification at page 13, line 29 to page 14, line 04; and by U.S. Patent No. 5,620,897 to Zappe,

incorporated by reference (page 14, lines 2 – 4), at col. 1, line 62 to col. 2, line 18; col. 2, lines 43 – 45; and col. 4, lines 51 – 55.

SUMMARY OF THE OFFICE ACTION

Claims 16 and 20 are pending in the application.

Claims 16 and 20 are rejected.

Applicant's election of species 1 in Paper No. 9 is acknowledged as an election without traverse.

The corrected drawings of **FIGS. 2, 3, and 5** have been approved by the Examiner.

The preliminary amendment filed on 09/13/00 has been entered.

THE CLAIMED INVENTION

The present invention provides a method for controlling the quality of a fluid which is to be purified. The method comprises (a) providing a filter for filtering the fluid; (b) conveying a portion of the fluid to the filter through a first passageway; (c) discharging a portion of the filtered fluid and a portion of the unfiltered fluid through a second passageway; (d) controlling the proportions of the fluid flowing through the first and second passageways; (e) analyzing the fluid discharged through the second passageway by determining the acid content of the fluid; (f) increasing the proportion of the fluid which is conveyed to the filter through the first passageway if the acid content of the discharged fluid is above industry standards; and (g) decreasing the proportion of the fluid which is conveyed to the filter through the first passageway if the acid content of the discharged fluid is appreciably below industry standards.

In the preferred embodiment of the present invention the fluid to be purified is analyzed by determining the free fatty-acid content of the discharged fluid.

SCOPE OF THE PRIOR ART

United States Patent (U.S.P.) No. 2,324,763 to Carruthers discloses a method for oil purification. The method comprises (a) providing a filter 16 for filtering the fluid; (b) conveying a portion of the filtered fluid and a portion of the unfiltered fluid through a second passageway 4, 13; and (c) controlling the proportions of the fluid flowing through the first and second passageways (e.g., using valves 17, 23, and 28).

U.S.P. 4,443,334 to Shugarman et al. discloses an oil-reclamation device which can be used for motor oil, industrial oil, or cooking oil.

THE EXAMINER'S RATIONALE

In rejecting claim 16 under 35 U.S.C. 103(a) over the patent to Carruthers, the Examiner asserts that Carruthers discloses a method which includes analyzing the fluid discharged from a filter, and cites a flow sight 26 to support the assertion. The Examiner further asserts that the method includes increasing the proportion of the fluid which is conveyed to the filter if the quality of the discharged fluid is below industry standards; e.g., when the oil has a dark color, and cites that portion of the patent from line 54 of col. 1 of page 1 to line 6 of col. 2 of page 1, and lines 27 – 35 of col. 1 of page 3 to support the assertion.

In rejecting claim 20 under 35 U.S.C. 103(a) over the patent to Shugarman et al., the Examiner observes that Shugarman et al. show that it is known in the art to use interchangeably filtration methods for either lubricating oils or cooking oils, and cites lines 17 – 18 of col. 1 and lines 1 – 14 of col. 4 in support thereof.

REMARKS

Claims 16 and 20 have been amended to overcome the Examiner's rejections under 35 U.S.C. 103(a) and 35 U.S.C. 112, and to define more clearly the subject matter which applicant regards as the invention.